

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/29/2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-28, 33-34, 37-38 and 78 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-17, 25-26, 34, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi et al (US 2005/0289617) in view of Callway (US 6,950,772).

Regarding Claim 1, Safadi discloses an interactive TV device (FIG.1), comprising:
an input (outputs of 202 and 203; 105-109), the input being configured to accept a plurality of input streams;
an output (105-109), the output being configured to a plurality of output streams;

a first digital bus coupled between the output of an input device and multiple output devices (the bus connects between the output of secondary tuner 203 and System Bus 112), the first digital bus being uninterrupted between the input and the output devices such that a digital signal is carried unchanged over the first digital bus to the output devices (a digital signal is carried unchanged over the digital bus to the output devices 106-109 via a System Bus 112);

an analog bus connected between the input and the output, the analog bus being separate from the first digital bus and including a video signal decoder coupled to the input and a video signal encoder coupled to the output (the analog bus connects from input Primary Tuner 202 to output PVR Disk 106 via Analog Security 111, a video decoder, and Encoder 110), and

a graphics processing assembly (103) coupled to the first digital bus (bus connects Secondary Tuner to System Bus) and to the analog bus (connects 202, 111 and 110).

Safadi discloses selecting a signal from multiple inputs (FIG.1, 202, 203, 107, 108) for processing (111, 110) or bypassing (secondary tuner to system bus) and selecting an output PVR Disk (106) from multiple outputs (105-109) for recording (Para 37; Para 38 lines 1-4).

Safadi does not specifically disclose physically using an input multiplexer for selecting an input among multiple inputs for processing and using an output multiplexer for selecting an output among multiple outputs for outputting.

In an analogous art, Callway discloses input and output multiplexers for selecting among multiple inputs for input processing and selecting among multiple outputs for outputting (FIG.2, elements 218, 208 and 228; Col 3 lines 49-57).

It would have been obvious to one of ordinary skill in the art to modify Safadi's system to physically include input and output multiplexers, as taught by Callway to isolate internal system bus from the external signal source to simplify design and improve circuit performance.

Regarding Claim 2, Safadi further discloses the input is configured to accept an input stream selected from a group including an analog video source, a digital video source, an IP connection, a video stream from a data carrier, a video stream from a video camera, an IR

Art Unit: 2623

connection, a wireless connection, a Universal Serial Bus-compatible port and the output of the interactive TV device (FIG.1; Para 37).

Regarding Claim 3, Safadi further discloses the output is configured to selectively output a video stream to at least one of a plurality of TV outputs, a disk recorder, to the input of the device, to a network, to a Universal Serial Bus-compatible port, to a SCART-compatible port and to a computer display (FIG.1; Para 38).

Regarding Claim 4, Safadi further disclose the digital bus is configured as a Digital Video Bus (FIG.1, 112; Para 47; bus carrying MPEG stream is DVB).

Regarding Claim 5, Safadi further in view of Callway disclose the input multiplexer being configured to selectively route at least one of the plurality of input video streams onto at least one of the digital bus and the analog bus (FIG.1, 202, 203, 106; Para 51; digital/analog channel signal, web site channel signal or recorded program signal can be selected as an input onto one of the digital bus and the analog bus through the primary tuner, secondary tuner or PVR disk).

Regarding Claim 6, Safadi further in view of Callway disclose the output multiplexer being configured to selectively route at least one video signal from at least one of the digital bus and the analog bus to the output (FIG.1, 101, 110, 102; Para 25; an analog signal from primary tuner 202 can be configured to be recorded on output PVR Disk 106).

Regarding Claim 7, Callway discloses the video signal encoder includes a PAL or NTSC or SECAM encoder and wherein the video signal decoder includes an HDTV or PAL or NTSC or SECAM decoder (Col 3 lines 32-37).

Art Unit: 2623

Regarding Claim 8, Safadi further discloses memory disk storage being accessible via a command bus that is coupled to the input, the output and to the graphics processing assembly (FIG.1, 104, 106; Para 23, Para 59).

Regarding Claim 9, Safadi further discloses the disk storage includes at least one of a magnetic hard disk and an optical disk reader and recorder (Para 24).

Regarding Claim 10, Safadi discloses further including a watchdog processor, the watchdog processor being coupled to the analog bus and the command bus and being configured to monitor a state of the device and to monitor and regulate traffic on the analog and command buses (FIG.1, 104; Para 51-54).

Regarding Claim 11, Safadi discloses graphics processing assembly includes first graphics engine and a second graphics engine (FIG.1, 110 and 103; MPEG encoder is first, MPEG decoder is the second).

Regarding Claim 12, Safadi discloses the first graphics engine includes a hardware video encoder and a hardware video decoder, both the video encoder and decoder being coupled to the digital bus and to the analog bus (FIG.1, 110, 103).

Regarding Claim 13, Safadi discloses the hardware video encoder and the hardware video decoder conform to a Motion Pictures Expert Group (MPEG) standard (Para 47).

Regarding Claim 14, Safadi discloses further comprising a Central Processing Unit (CPU) coupled between an output of the video encoder and an input of the video decoder, the CPU also being coupled to the digital bus (FIG.1; CPU 104 coupled to input of the video decoder 111 and output of the video encoder 103).

Regarding Claim 15, Safadi discloses the second graphics engine includes a graphics processor coupled to the CPU (FIG.1, 103 is coupled to 104).

Regarding Claim 16, Safadi discloses the graphics processing assembly further includes a video controller coupled to the CPU and the output (FIG.1, CPU 104 is also a video controller).

Regarding Claim 17, Safadi further discloses an integrated video camera (Para 25 lines 8-11).

Regarding Claims 25 and 26, Safadi discloses the device is further configured to connect to at least one of a keyboard and a pointing device and microphone (Para 55).

Regarding Claim 34, Safadi discloses further comprising means for recording incoming analog or digital video streams and storing the recorded video streams on the disk storage (FIG.1, 106; Para 22).

Regarding Claim 37, Safadi discloses further comprising means for Web browsing (Para 60).

Regarding Claim 38, Safadi discloses further comprising means for composing and managing email (Para 61).

5. Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi et al (US 2005/0289617) and Callway (US 6,950,772) as applied to claims 1 and 17 above, and further in view of Lee (US 6,507,366).

Regarding Claim 18, Safadi and Callway do not specifically disclose the video camera is configured to automatically track a person. Lee discloses the video camera is configured to automatically track a person (7, 6-31). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Safadi and Callway in view of Lee so that the person is always positioned in front of the lens of a camera (Lee [1, 5-10]).

Regarding Claim 19, Safadi and Callway do not specifically disclose an auto-tracking analog controller configured to control the integrated video camera using analog signals from a video composite signal generated by the integrated video camera. Lee discloses further comprising an auto-tracking analog controller configured to control the integrated video camera using analog signals from a video composite signal generated by the integrated video camera [7, 6-31]. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Safadi and Callway in view of Lee so that the person is always positioned in front of the lens of a camera (Lee [1, 5-10]).

Regarding Claim 20, Lee discloses the auto-tracking analog controller includes: means for separating scan lines signals and frames signals from the video composite signal; a horizontal displacement controller configured to generate a move left signal and a move right signal from the scan lines signals and the video composite signal to control right and left movement of the integrated video camera, and a vertical displacement controller configured to generate a move up signal and a move down signal from the frames signals and the video composite signal to control up and down movement of the integrated video camera (Lee figs. 5 and 6 ; [7, 6-55]; [8, 5-30]).

Regarding Claim 21, Lee discloses the horizontal displacement controller is configured to carry out a comparison of a current horizontal position of the person as determined from the scan lines signal and the video composite signal with a previous horizontal position of the person and

Art Unit: 2623

to selectively output either the move right signal or the move left signal depending upon a result of the comparison (Lee figs. 5 and 6; [7, 6-55]; [8, 5-30]).

Regarding Claim 22, Lee discloses the vertical displacement controller is configured to carry out a comparison of a current vertical position of the person as determined from the frame lines signal and the video composite signal with a previous vertical position of the person and to selectively output either the move up signal or the move down signal depending upon a result of the comparison (Lee figs. 5 and 6; [7, 6-55]; [8, 5-30]).

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi et al (US 2005/0289617) and Callway (US 6,950,772) as applied to claims 1 and 17 above, and further in view of Anderson et al (US 5,903,829).

Regarding Claim 23, Safadi and Callway are silent about a removable cover configured to be fitted over a front face of the interactive TV device to physically obscure a field of view of the camera.

In an analogous art, Anderson discloses a removable cover configured to be fitted over a front face of a device (FIG.1, -104; Col 5 lines 22-24).

It would have been obvious to one of ordinary skill in the art to modify the combined system of Safadi and Callway to include a removable front cover as taught by Anderson for easy access inside for maintenance.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi et al (US 2005/0289617) and Callway (US 6,950,772) as applied to claim 1 above, and further in view of Shintani (US 2007/0124755 A1).

Art Unit: 2623

Regarding Claim 24, Safadi and Callwat are silent about comprising at least one of a smart card reader and a magnetic card reader.

In an analogous art, Shintani discloses a smart card reader (FIG.1, -9).

It would have been obvious to one of ordinary skill in the art to modify the system of Safadi and Callway to include a smart card reader as taught by Shintani as an easier and conventional way of conditional access for pay TV service.

8. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi et al (US 2005/0289617) and Callway (US 6,950,772) as applied to claim 1 above, and further in view of Eldering (US 2006/0248555).

Regarding Claim 27, Safadi and Callway do not specifically disclose the device is configured to retrieve a list of available service and content providers from a remote server over a network, based upon a localization indicium supplied to the remote server.

In an analogous art, Eldering discloses the device is configured to retrieve a list of available service and content providers from a remote server over a network, based upon a localization indicium supplied to the remote server (Para 11).

It would have been obvious to one of ordinary skill in the art to modify the combined system of Safadi and Callway to include retrieving a list of available service and content providers from a remote server over a network, based upon a localization indicium as taught by Eldering in order to allow a person to receive customized information pertaining to his locality.

Regarding Claim 28, Eldering further disclose the localization indicium is selected from an area code of a region in which the device is located (FIG.5, -503).

Art Unit: 2623

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi et al (US 2005/0289617) and Callway (US 6,950,772) as applied to claims 1 and 8 above, and further in view of Duncan et al (US 2004/0093455).

Regarding Claim 33, Safadi and Callway are silent about further comprising a removable drawer including a plurality of electronic modules, the removable drawer being configured to electrically couple selected one of the plurality of electronic modules to at least one of the command bus, the analog bus and the digital bus.

In an analogous art, Duncan discloses a removable drawer including a plurality of electronic modules, the removable drawer being configured to electrically couple selected one of the plurality of electronic modules to at least one of the command bus, the analog bus and the digital bus (FIG.5).

It would have been obvious to one of ordinary skill in the art to modify Safadi and Callway to include a removable drawer including a plurality of electronic modules as taught by Duncan so as to allow the user to upgrade or alter the system more easily.

10. Claim 78 is rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi et al (US 2005/0289617) and Callway (US 6,950,772) as applied to claim 1 above, and further in view of Jaff et al (US 2007/0118855).

Regarding Claim 78, Safadi and Callway are silent about further the interactive television device is coupled to a remote database and configured to periodically query the database to determine what services and content are available.

In an analogous art, Jaff discloses the interactive television device is coupled to a remote database and configured to periodically query the database to determine what services and content are available (Para 9 lines 2-4).

Art Unit: 2623

It would have been obvious to one of ordinary skill in the art to modify Safadi and Callway to include the interactive television device is coupled to a remote database and configured to periodically query the database to determine what services and content are available as taught by Jaff to automatically update the programming services and reduce the query time for the user.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED PENG whose telephone number is (571)270-1147. The examiner can normally be reached on Monday-Friday 09:00-18:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fred Peng
Patent Examiner

Vivek Srivastava
Supervisory Patent Examiner

/Annan Q Shang/
Primary Examiner, Art Unit 2623